SS-SP*-100 and SSW-SP*-100 Spectra-STAR PAR™ Series Installation and Instruction Manual

© 2010 Altman Lighting, Inc.
57 Alexander Street, Yonkers
New York 10701 U.S.A.
Phone 914.476.7987 • Fax 914.966.1980
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SAFETY INSTRUCTIONS

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRICAL SHOCK, OR INJURY TO PERSONS FOR SS-PAR-100 SERIES LED LIGHTING FIXTURES.

WARNING! - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, FOLLOW THESE IMPORTANT SAFETY INSTRUCTIONS:

CAUTION: RISK OF ELECTRIC SHOCK, DO NOT USE EXTENSION CORD NEAR WATER OR WHERE WATER MAY ACCUMULATE. KEEP LAMP AT LEAST 16 FEET AWAY FROM POOLS AND SPAS. KEEP PLUGS AND RECEPTACLES DRY. FOR USE ONLY IN GFCI PROTECTED CIRCUITS.

1) Turn off, unplug power, and allow fixture to cool before cleaning or servicing.

2) Ensure that fixture is properly grounded.

3) Ensure that heat sink fins are not obstructed.

4) Do not look directly at lighted LEDs.

5) Keep away from flammable materials.

6) No user serviceable parts inside. Replace entire LED assembly.

7) Do not touch the LEDs at any time. Use a soft lint-free cloth to clean lens. Do not use solvents to clean. Use cloth dampened with water. Allow to dry completely before reenergizing.

8) Do not operate the unit with a missing or damaged lens.

----------SAVE THESE INSTRUCTIONS!----------

INSTRUCTIONS DE SÛRETÉ

LES INSTRUCTIONS AU SUJET D'UN RISQUE D'INCENDIE LE CHOC ÉLECTRIQUE, OU LA BLESSURE AUX PERSONNES POUR SS-PAR-100 APPAREILS D'É CLAIRAGE DE LED.

AVERTISSEMENT! - POUR RÉDUIRE LE RISQUE D'INCENDIE, LE CHOC ÉLECTRIQUE, OU LA BLESSURE AUX PERSONNES, SUIVRE CES INSTRUCTIONS DE SÉCURITÉ IMPORTANTES:

ATTENTION : LE RISQUE DE DÉCHARGE ÉLECTRIQUE, N'EMPLOIENT PAS LA CORDE DE PROLONGATION PRÈS DE L'EAU OU OÙ L'EAU PEUT S'ACCUMULER. GARDEZ LA LAMPE AU MOINS 16 PIEDS À PARTIR DES PISCINES ET DES STATIONS THERMALES. MAINTENEZ LES FICHES ET LES DOUILLES SÈCHES. POUR L'USAGE SEULEMENT DANS DES CIRCUITS PROTÉGÉS PAR GFCI.

1) Éteignez, débranchez la puissance, et permettez au montage de se refroidir avant le nettoyage ou l'entretien.

2) Assurez-vous que le montage est correctement relié à la terre.

3) Assurez-vous que ailerons de radiateur ne sont pas obstruées.

4) Ne regardez pas directement la LED allumée.

5) S'éloigner des materiaux inflammables.

6) Aucunes pièces utiles d'utilisateur à l'intérieur. Remplacez la LED entière.

7) Ne touchez pas la LED à tout moment. Employez un chiffon non pelucheux mou pour nettoyer l'objectif. N'employez pas les dissolvants pour nettoyer.peut employer le tissu humecté de l'eau.laissez sécher complètement avant de reenergizing.

8) Ne pas faire fonctionner l'appareil avec un diffuseur antérieur ou une lampe.

----------GARDER CES INSTRUCTIONS!----------

SS-SP*-100 and SSW-SP*-100 Spectra-STAR PAR™ LED Series Solid State Lighting Fixture

DESCRIPTION

The SS-SPP-100 and SS-SPY-100 LED lighting fixture is a portable outdoor weather rated unit with a flexible power supply cord and male and female DMX-512 data supply cords. The overall construction of the fixture includes corrosion protected aluminum die-cast housing and allows for a yoke or mounting brackets. The fixture is supplied with a state of the art microprocessor-controlled solid-state LED light engine incorporating Luxeon Rebel LEDs and an on-board power supply. The LED substrate is coupled to a highly efficient copper heat sink and cooling system for prolonged life of the LEDs. The fixture can be ceiling mounted to a pipe or stand mounted. All components and electrical devices are ETL or UL Listed or Recognized. A safety cable is provided for use when securing the fixture to a pipe.

PACKING LIST

The SS-SPP-100 and SS-SPY-100 LED lighting fixture is shipped with the following:

SS-SPP-100 or SS-SPY-100 with Safety Cable and integral

Power Supply Cord and DMX-512 Data Supply Cords.

Installation and Instruction Manual.

Integral Yoke and set of four lenses.

WARNING:

ALL ELECTRICAL WIRING AND CONNECTIONS SHOULD BE PERFORMED BY A QUALIFIED ELECTRICIAN

SETUP AND INSTALLATION

Unpacking

Remove the LED lighting fixture from its shipping box. Set the unit down on a flat surface before proceeding.

Lamping and Re-lamping

The LED lighting fixture is provided with an integral LED light engine. Under normal operating conditions, the LED light engine should have a rated life expectancy of over 50,000 hours. There are no user serviceable parts inside. The entire LED assembly will need to be changed.

Mounting the fixture

For ceiling mounting, install the Yoke and a Pipe Clamp if desired. Loosen the bolt on the pipe clamp mounted on top of the fixture yoke until the clamp fits snugly around the mounting pipe. Make sure the clamp wraps securely around the pipe surface. Tighten up the bolt securely to the pipe. Next, loop the safety cable around the pipe and yoke, and then clip it back onto the cable itself. For stand mounting, remove the Pipe Clamp and rotate the Yoke to the bottom of the fixture. Secure the Yoke to the stand with a bolt and washer. For floor mounting, use a weighted base suitable for securing the yoke and fixture to it and not allowing the fixture to fall. For outdoor use, it is recommended to mount the fixture with the keypad on the underside to prevent accumulation of dirt, water, bird droppings, etc. If track mounted, install track adapter into lighting track.

Connecting power to the fixture

Plug the fixture into a grounded receptacle connected to a circuit breaker. Connect DMX signal to the fixture.

Focusing the fixture

With the fixture energized, point the unit in the direction of the object to be illuminated. Adjust the yoke or feet to the desired position and secure the fixture with the two handles provided on either side of the yoke. Remove lens holder and insert a desired beam spread lens into the holder and snap ring back into the front of the fixture. The top knob locks the lens ring and prevents it from rotating once the desired focus is achieved.

Cleaning the fixture

Routine cleaning of the SS-PAR-100 lighting fixture will provide years of prolonged use. Use compressed air to blow off any dust and dirt from the lens, reflector, electronics and heat sink. For the lens, use a soft lint-free cloth dampened with water to clean the lens of dust and dirt. Dry off completely with compressed air or a dry lint-free cloth.

ETL FILE LISTING

The SS-SPP-100 and SS-SPY-100 lighting fixture is ETL and c-ETL pending under Altman File 9700680 for Portable Electric Luminaires (UL Standard 153) and Surface Mount Luminaires (UL Standard 1598).

FEATURES

The LED lighting fixture complements the Theatrical and Architectural Lighting Industry and adds to the expanding Spectra-LED™ family of solid state LED luminaires offered by Altman Lighting, Inc.

- Four-Colors: Red, Green, Blue, and Amber for more color combinations and better CRI.
- Compatible with DMX-512 and RDM protocols including Wybron Responder System.
- 8/16 bit DMX-512 control for smoother dimming and color or white fades.
- Outdoor IP65 rating.
- Interchangeable front lens and rotating system for different output beam projections.
- On board power supply, microprocessor controller, and current drivers.
- Feed thru DMX/RDM data with a maximum total run of 1000 feet.
- Push button addressing.
- Stand-Alone Pre-Programmed Operational Modes.
- Built-in flicker-free TV mode.
- Keypad Lock functions to prevent accidental Re-Programming.
- Efficient cooling system offering Silent Operation with No Fans.

OPERATION (Firmware Version: V2.2.1 Date: 2010-08-23)

SETTINGS

There are 3 buttons below the 3 digit LED display on the side of the unit. The buttons are : (From left to right) [HUNDREDS] , [TENS] , [ONES].
All settings for Modes, DMX address, Personalities, etc., can be made by using the three buttons on the back of the unit while power is on. . (Note: Display goes out after no activity for approx 4 sec. Touch any button once to bring it back on.)

There are 3 main operating Modes: **Normal, Fixed Color,** and **Locked.**

Normal Mode:

Normal Mode is used for Setting DMX address, Personalities, and Stand-alone Effects.
This is the default mode for a new unit

DMX address To set, press the buttons repeatedly (or hold) to count up until the desired DMX address (1-512), appears on the display. Wait a few seconds, the display will blink once quickly, and the address is set live and retained in memory, even if you remove power.
(RDM addressing sent from a remote unit will overwrite local DMX setting.)

PERSONALITIES:

There are 8 different personalities.
Each personality is made up of 3 settings: RESOLUTION (8 Bit /16 Bit), MASTER (On /Off), and SMOOTHING (On/Off) which are explained in greater detail below.

The current active Personality # is displayed for about 1 second during power up. The format is Pxx where xx is replaced by the active personality #01-08.

To set the desired Personality, you must be in Normal mode (not Fixed Color mode).

To select the personality:

> Press the buttons until the desired personality address 601-608) appears in the display (see list below).
> Wait a few seconds, and a confirmation display will appear that shows a question mark? on the left, followed by the personality #. This gives you an opportunity to either accept or reject the new setting.
To accept the personality, press the [ONES] button.
To reject the personality, press the [HUNDREDS] button (below the ?).

Once the new personality is accepted, it is entered into memory and retained even if power is disconnected. Once personality is either accepted or rejected, the display will go back to the current DMX address. The default personality for a new unit is #02.

EXAMPLE: Let's say that we want to select personality #05. We enter 605 on the display. After a few seconds the display will show ?05 . Since we want this, we press the [ONES] button (below the 5), and that enters personality #05 into memory.

PERSONALITY ADDRESS SETTINGS LIST (601-608) 4-COLOR CHANNELS:

601 =	Personality #01 (Uses 4 DMX channels)	8 Bit , Channel order	Master OFF, is RGBA	Smoothing OFF
602 =	Personality #02 (Uses 4 DMX channels)	8 Bit , Channel order	Master OFF, is RGBA	Smoothing ON
603 =	Personality #03 (Uses 5 DMX channels)	8 Bit, Channel order	Master ON, is RGBAM	Smoothing OFF
604 =	Personality #04 (Uses 5 DMX channels)	8 Bit, Channel order	Master ON, is RGBAM	Smoothing ON
605 =	Personality #05 (Uses 8 DMX channels)	16 Bit, Channel order	Master OFF, is RrGgBbAa	Smoothing OFF
606 =	Personality #06 (Uses 8 DMX channels)	16 Bit, Channel order	Master OFF, is RrGgBbAa	Smoothing ON
607 =	Personality #07 (Uses 10 DMX channels)	16 Bit, Channel order	Master ON, is RrGgBbAaMm	Smoothing OFF
608 =	Personality #08 (Uses 10 DMX channels)	16 Bit, Channel order	Master ON, is RrGgBbAaMm	Smoothing ON

SSW-SP*-100 PERSONALITY ADDRESS SETTINGS LIST (609-612) 1-COLOR CHANNELS:

609 =	Personality #09 (Uses 1 DMX channel)	8 Bit,	Smoothing OFF
610 =	Personality #10 (Uses 1 DMX channel)	8 Bit,	Smoothing ON
611 =	Personality #11 (Uses 1 DMX channel)	16 Bit,	Smoothing OFF
612 =	Personality #12 (Uses 1 DMX channel)	16 Bit,	Smoothing ON

RESOLUTION is selectable as either:

8 Bit (one DMX channel per color) this is normal resolution,
or
16 Bit (two DMX channels per color Coarse+Fine high resolution similar to moving lights).

If unit is in 8 Bit mode, and the unit is set to DMX Channel 001, then the DMX channels would be:

CH1 = Red,
CH2 = Green,
CH3 = Blue,
CH4 = Amber.

If unit is in 16 Bit Mode, and the unit was set to DMX Channel 001, then the DMX channels would be:

CH1 = Red Coarse, CH2 = Red Fine,
CH3 = Green Coarse, CH4 = green Fine,
CH5 = Blue Coarse, CH6 = Blue Fine,
CH7 = Amber Coarse, CH8 = Amber Fine.

MASTER is selectable as **ON** or **OFF** and provides a Master fade channel that dims all 4 colors proportionally at the same time in order to maintain the color .

If you are in 8 Bit mode and the unit is set to DMX Channel 001, then the DMX channels would be:

CH1 = Red
CH2 = Green
CH3 = Blue
CH4 = Amber
CH5 = Master
If you are in 16 Bit mode and the unit is set to DMX Channel 001, then the DMX channels would be:

CH1 = Red Coarse, CH2 = Red Fine,
CH3 = Green Coarse, CH4 = Green Fine,
CH5 = Blue Coarse, CH6 = Blue Fine,
CH7 = Amber Coarse, CH8 = Amber Fine,
CH9 = Master Coarse , CH10 = Master Fine.

SMOOTHING is selectable as **ON** or **OFF** and provides a smooth transition ramp from one level to another in a similar way to how an incandescent lamp behaves. This helps to eliminate the "steppiness" associated with LED fixtures that is caused by the instantaneous response of LEDs.

STAND-ALONE EFFECTS (does not require a control console):
Note: stand-alone effects from a single unit will control other units connected via DMX cable to all synchronize. Set other units to DMX Channel 001.
(Do not use the Stand-Alone Effects while connected to a control console or a conflict will result.)

Color Fades (700-799):

700 - 709 = R>A>G>B fade	700 = faster	709 = slower
740 - 749 = B>G>A>R fade	740 = faster	749 = slower
780 - 789 = R>A>G>B>W fade	780 = faster	789 = slower
790 - 799 = W>B>G>A>R fade	790 = faster	799 = slower

Strobes (**800-879):**

800 - 809 = WHITE STROBE	800 = faster	809 = slower
810 - 819 = RED STROBE	810 = faster	819 = slower
820 - 829 = AMBER STROBE	820 = faster	829 = slower
830 - 839 = GREEN STROBE	830 = faster	839 = slower
840 - 849 = BLUE STROBE	840 = faster	849 = slower
850 - 858 = R-A-G-B RAINBOW STROBE	850 = faster	859 = slower
870 - 879 = B-G-A-R RAINBOW STROBE	870 = faster	879 = slower

Fixed Color Mode:

This is a special mode that allows you to manually select colors for a single unit using the 3 keys.

To enter Fixed Color Mode (or exit to Normal Mode) :

>Wait a few seconds until the display goes blank,
> press and hold the [ONES] button
> press and hold the [TENS] button
> release the [ONES] button
> release the [TENS] button.

STAND-ALONE FIXED COLOR MODE

While in stand-alone mode, the hundreds button cycles through 'r', 'G', 'b', and 'A'. colors . The tens and ones digits select 0-99 values. 99 is actually full. The 0-255 scale is spread evenly over the 0-99 display range.

NOTE: when you go in or out of fixed color mode, the display will go blank. Touch any button to turn on display.

Locked Mode

To Lock (or unlock) the buttons:

>Wait a few seconds until the display goes blank,
> press and hold the [ONES] button
> press and hold the [HUNDREDS] button
> release the [ONES] button
> release the [HUNDREDS] button.

Display will show Loc for a moment and then blink.
Buttons will have no effect until they are unlocked.

Master and Slave Mode

To Turn On (or Off) the MASTER:

>Wait a few seconds until the display goes blank,
> press and hold the [HUNDREDS] button
> press and hold the [ONES] button
> release the [HUNDREDS] button
> release the [ONES] button.

Display will show ON or OFF for a moment and then blink.

Note to User:

For White Color LEDs, RGBA is replaced by four channels of White or a single channel of White as selected under the Personalities.